CLAIMS

We claim:

1. A kit comprising (i) at least two dyes that are essentially endotoxin-free and (ii) instructions for preparing hybrid cells from reactant cells by a method that entails contacting reactant cells with one of said dyes, respectively.

2. A kit comprising at least two essentially endotoxin-free dyes and an agent that promotes cell fusion.

3. A kit according to ~~either claim 1 or~~ claim 2, wherein said dyes are cyanine dyes.

4. A hybrid cell preparation, comprising a hybrid cell that contains no more than n-1 selectable markers, wherein n represents the number of reactant cells used to form the hybrid and wherein said preparation is substantially free of non-hybrid cells.

5. A hybrid cell preparation, comprising a hybrid of a primary tumor cell and an antigen presenting cell, wherein said preparation is substantially free of non-hybrid cells.

6. A hybrid cell preparation, comprising a hybrid of a normal cell and an antigen-presenting cell which lacks an accessory factor required to generate a positive immune response, wherein said preparation is substantially free of non-hybrid cells.

7. A preparation according to claim 6, wherein said normal cell is isolated from a transplant organ.

8. A hybrid cell preparation, comprising a hybrid of a pathogenic cell and an antigen-presenting cell, wherein said preparation is substantially free of non-hybrid cells.

9. A preparation according to claim 8, wherein said pathogenic cell is a parasite.

10. A hybrid cell preparation, comprising a hybrid cell labeled with at least two different dyes, wherein said preparation is substantially free of non-hybrid cells.

11. A preparation according to claim 10, wherein said dyes are cyanine dyes.

12. A preparation according to claim 10, wherein said hybrid cell is derived from a reactant cell that is a dendritic cell.

13. A preparation according to claim 10, wherein said hybrid cell is derived from a reactant cell that is an immature B cell.

14. A method of preparing a hybrid cell, comprising:

(a) bringing at least two different cells into contact under conditions that promote cell fusion, and then

(b) purifying the resultant hybrid without antibiotic or metabolic selection.

15. A method according to claim 14, further comprising labeling each of said different cells with a different fluorescent dye, wherein said purification is accomplished using fluorescence activated cell sorting.

16. A method according to claim 15, wherein said hybrid cell comprises at least one cell selected from the group consisting of a macrophage, a dendritic cell, and an antigen presenting cell that lacks an accessory factor required to generate a positive immune response.

17. A method according to claim 14, wherein said hybrid cell comprises at least one cell selected from the group consisting of a tumor cell, a pathogenic cell and a normal cell.

18. A method of preparing a hybrid cell, comprising:

(a) bringing two different cells into contact conditions that promote cell fusion and

(b) purifying the resultant hybrid cell in less than 48 hours.

19. A method of preparing a hybrid cell, comprising:

(a) contacting a first cell with a first dye

(b) contacting a second cell with a second dye,

(c) contacting said first and second cells with one another under conditions that promote cell fusion, and

(d) purifying the resultant hybrid cell.

20. A method according to claim 19, wherein said dyes are two different cyanine dyes and wherein said purification is accomplished using fluorescence activated cell sorting.

21. A method according to claim 20, wherein said hybrid cell comprises at least one cell selected from the group consisting of a macrophage, a dendritic cell, and an antigen presenting cell that lacks an accessory factor required to generate a positive immune response.

22. A method according to claim 20, wherein said hybrid cell comprises at least one cell selected from the group consisting of a tumor cell, a pathogenic cell and a normal cell.

23. A method of treating cancer, comprising:

(a) providing hybrid cell preparation according to claim 12, wherein said hybrid cell is derived from a second reactant cell that is a cancer cell; and

(b) administering said preparation to a cancer patient.

24. A method according to claim 23, further comprising administering to said patient a therapeutically effective amount of interleukin 2.

25. A method of treating a disorder associated with the presence of a pathogenic organism, comprising:

(a) providing hybrid cell preparation according to claim 12, wherein said hybrid cell is derived from a second reactant cell that is derived from said pathogenic organism; and,

(b) administering said preparation to a patient.

26. A method according to claim 25, further comprising administering to said patient a therapeutically effective amount of interleukin 2.

27. A method of inducing immune tolerance to an antigen, comprising:

(a) providing hybrid cell preparation according to claim 13, wherein said hybrid cell is derived from a second reactant cell that expresses an antigen against which immune tolerance is sought; and

(b) administering said preparation to a patient.

28. A method ~~according~~ to claim 27, wherein said second reactant cell is a cell from a ~~transplant~~ organ ~~and said~~ patient is in need of an organ transplant.

add B3

add C1

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